

PHY 131 sec. EG
Homework 6
W. Trimble
Due: Monday 2017-10-02

Problems for Urone 3.4, 3.5, 4.1, and 4.2 Acceleration in a circle, work and kinetic energy.

Exercises

1. Urone 3.14 Two workers push horizontally in the same direction on a 250-kg wooden crate...
2. Urone 3.20 Two movers push horizontally on a refrigerator...
3. Urone 3.48 What acceleration is experienced by passengers ...
4. Urone 3.50 At how many revolutions per minute must a centrifuge rotate...
5. Urone 3.51 Friction between tires and pavement... find maximum speed wet and dry for a 30 m-radius turn.
6. Urone 4.2 Calculate the work done by a 55-kg person in climbing a flight of stairs 2.0m high.
7. Urone 4.4 Compare the kinetic energy of a 50-kg athlete running at a speed of 3.0 m/sec with that of a 25-kg cheetah running at 20 m/sec.